



PUGET SOUND CLEAN AIR AGENCY

110 Union Street Suite 500 Seattle, WA 98101-2038

Telephone: (206) 689-4057 Fax (206) 343-7522

www.pscleanair.org

NOTICE OF CONSTRUCTION AND APPLICATION FOR APPROVAL

SOLVENT METAL CLEANERS		FORM S-D	
(Vapor Degreasers, Cold Cleaners, Cold Solvent Degreasers)			
FOR AGENCY USE ONLY		Date Received	Registration No.
		NOC No.	
Type of Business (check) <input type="checkbox"/> New <input type="checkbox"/> Existing	Status of Equipment (check) <input type="checkbox"/> New <input type="checkbox"/> Altered <input type="checkbox"/> Existing <input type="checkbox"/> Relocation	Applicant	
Company (or Owner Name)		Applicant Address	
Company (or Owner) Mailing Address		Installation Address	
Degreaser Manufacturer		Model Number	Serial Number
Freeboard Height:	(a) Cold-cleaning tank (distance from the top of the solvent to the top of the tank) _____ (b) Vapor-degreasing tank (distance from the solvent vapor-air interface to the top of the tank) _____		
Inside Dimensions of Tank (inches): _____ (length) x _____ (width) x _____ (depth)		Freeboard Ratio: (Freeboard height divided by inside width) <u>NOTE</u> : BACT requirement is 100%)	
Method of Heating:	<input type="checkbox"/> Gas _____ Btu/Hr	<input type="checkbox"/> Electric _____ KW	<input type="checkbox"/> Steam
Operating Schedule:	_____ Hours/day	_____ Days/week	_____ Weeks/year
Tank covered when not in use? <input type="checkbox"/> Yes <input type="checkbox"/> No			

Please fill in one of the following:

(a)	For Cold Degreaser only	<input type="checkbox"/> Cover <input type="checkbox"/> Water Cover <input type="checkbox"/> Other _____		
(b)	For Vapor Degreaser only (check box for yes)	<input type="checkbox"/> Refrigerated Freeboard Chiller (required for BACT)	<input type="checkbox"/> Spray Safety Switch	
		<input type="checkbox"/> Vapor Level Switch <input type="checkbox"/> Horizontal Sliding Cover	<input type="checkbox"/> Spray Wand	
(c)	For ConveyORIZED Degreaser only (check box for yes)	<input type="checkbox"/> Powered Hoist - Hoist Speed: _____ ft/min		
		<input type="checkbox"/> Refrigerated Freeboard Chiller (required for BACT)	<input type="checkbox"/> Spray Safety Switch	
		<input type="checkbox"/> Vapor Level Switch <input type="checkbox"/> Hood	<input type="checkbox"/> Drying Tunnel	
		<input type="checkbox"/> Powered Hoist - Hoist Speed: _____ ft/min		

Quantity of Solvents used:	a. Perchloroethylene	_____	gallons per month
	b. 1-1-1 Trichloroethane	_____	gallons per month
	c. Other: _____	_____	gallons per month

Signature of Responsible Person	Name	Title
	Printed	Date

NOTE: Regulation I Section 6.07(c) requires Best Available Control Technology (BACT) for all new installations. Our BACT requirements include: Degreasers shall be operated at 100% freeboard ratio, equipped with a refrigerated freeboard chiller, and have a sliding, horizontal cover. See reverse side for definition of BACT, Section 6.07(c) of Regulation I, and Section 3.05 of Regulation III.

REGULATION I – SECTION 1.07 GENERAL DEFINITIONS

BEST AVAILABLE CONTROL TECHNOLOGY means technology that will result in an emission standard, including a visible emission standard, based on the maximum degree of reduction which the Agency, on a case-by-case basis, taking into account energy, environmental, and economic impacts, and other costs, determines is achievable for such source through application of production processes, available methods, systems, and techniques, including fuel cleaning or treatment, clean fuels, or innovative fuel combustion techniques for control of each air contaminant. In no event shall application of the best available control technology result in emissions of any air contaminant that would exceed the emissions allowed by any applicable standard under 40 CFR Parts 60, 61, and 63. The Agency may prescribe a design, equipment, work practice, or operational standard, or combination thereof, to meet the requirements of best available control technology. Such standard shall, to the degree possible, set forth the emission reduction achievable by implementation of such design, equipment, work practice, or operation and shall provide for compliance by means that achieve equivalent results.

REGULATION I – SECTION 6.07(C) ORDER OF APPROVAL TO PREVENT CONSTRUCTION

No approval shall be issued unless the Notice of Construction and Application for Approval demonstrates to the Board or Control Officer that: ... best available control technology is employed for the installation of new sources and the modification of existing sources.

REGULATION III - SECTION 3.05 SOLVENT METAL CLEANERS)

- (a) It shall be unlawful for any person to cause or allow the operation of any solvent metal cleaner unless it includes all of the following equipment:
- (1) A cover for the solvent tank which shall be closed at all times except when processing work in the degreaser. However, the cover shall be closed to the maximum extent possible when parts are being degreased.
 - (2) A facility for draining cleaned parts such that the drained solvent is returned to the solvent tank.
 - (3) For cold solvent cleaners, a freeboard ratio greater than or equal to 0.75.
 - (4) For vapor degreasers, the following equipment:
 - (A) Both the following safety switches:
 - (i) A high vapor cutoff thermostat with manual reset; and
 - (ii) For degreasers with spray devices, a vapor-up thermostat which will allow spray operation only after the vapor zone has risen to the design level.
 - (B) And one of the following:
 - (i) A freeboard ratio greater than or equal to 0.75; or
 - (ii) A refrigerated freeboard chiller.
 - (5) For conveyORIZED vapor degreasers:
 - (A) A drying tunnel or a rotating basket sufficient to prevent cleaned parts from carrying liquid solvent out of the degreaser.
 - (B) Both of the following safety switches:
 - (i) A high vapor cutoff thermostat with manual reset; and
 - (ii) A vapor-up thermostat which will allow conveyor movement only after the vapor zone has risen to the design vapor level.
- (b) It shall be unlawful for any person to cause or allow the operation of any solvent metal cleaner unless the following requirements are met:
- (1) Solvent shall not leak from any portion of the degreasing equipment.
 - (2) Solvent, including waste solvent, shall be stored in closed containers and shall be disposed of in such a manner as to prevent its evaporation into the atmosphere.
 - (3) For cold cleaners, cleaned parts shall be drained until dripping ceases.
 - (4) Degreaser construction shall be such that the liquid solvent from the cleaned parts drains into a trough or equivalent device and is returned to the solvent tank.
 - (5) For open-top vapor degreasers, solvent drag-out shall be minimized by the following measures:
 - (A) Racked parts shall be allowed to fully drain.
 - (B) The work load shall be degreased in the vapor zone until condensation ceases.
 - (C) Spraying operations shall be done within the vapor layer.
 - (D) When using a powered hoist, the vertical speed of parts in and out of the vapor zone shall be less than 3 meters per minute (10 feet per minute).
 - (E) When the cover is open, the lip of the degreaser shall not be exposed to steady drafts greater than 15.3 meters per minute (50 feet per minute).
 - (F) When equipped with a lip exhaust, the fan shall be turned off when the cover is closed.
 - (6) For conveyORIZED vapor degreasers, solvent drag-out shall be minimized by the following measures:
 - (A) Racked parts shall be allowed to fully drain.
 - (B) Vertical conveyor speed shall be maintained at less than 3 meters per minute (10 feet per minute).
- (c) After July 1, 1993, it shall be unlawful for any person to cause or allow the operation of any vapor degreaser employing a toxic air contaminant unless:
- (1) Such person has conducted an analysis of available alternative technologies considering cost and performance and has determined that no acceptable alternative exists; and
 - (2) The vapor degreaser employs the following equipment:
 - (A) A cover which opens horizontally; and
 - (B) A freeboard ratio greater than or equal to 1.00; and
 - (C) A refrigerated freeboard chiller.